

Claims

1. Method for mapping layer-3 packets over Synchronous Digital Transport Networks (SDH/SONET) and/or Optical Transport Networks (OTN), said method comprising the steps of:
 - setting up SDH/SONET and/or OTN connections over respective
5 networks;
 - setting up a modified PPP protocol of PPP packets, without the LCP and NCP protocols for negotiation;
 - inserting the layer-3 packets in the modified PPP packet;
 - adding a GFP header of a GFP mapping layer to the the modified PPP
10 packet, to get GFP packets;
 - setting a new value of UPI (User Payload Identifier) field in the GFP header;
 - transmitting GFP packets so obtained over the SDH/SONET and/or OTN networks.
2. Method according to claim 1, wherein said modified PPP protocol
15 of PPP packets comprises:
 - a PPP header, field Protocol, the value of which identifies the type of layer-3 payload;
 - the said layer-3 payload, comprising in turn an header and a payload
part;
 - a PPP tail, field FCS, used for error checking of the PPP packet.
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3. Method according to claim 1, wherein said layer-3 packets are MPLS or IP or IPX or IPv6.
4. Method according to claim 1, wherein said GFP header comprises the following fields:
 - 25 - PLI: payload length indication;
 - HEC: Header Error Check, with the following possibilities:
 - cHEC: core HEC, check on the Header field;
 - tHEC: type HEC, check on the Type field;
 - eHEC: extension HEC, check on the Extension header;

- PTI: Payload Type identifier;
- PFI: Payload FCS identifier;
- EXI: Extension Header identifier;
- UPI: User Payload identifier: the said new value of UPI.